

5

Processing functions in a communication device are partitioned into a sequence of operational levels having corresponding status indications which are captured prior to a fault or other abnormal condition and retained during re-cycling of the sequence of operations for use in status monitoring or fault diagnosis. In a modem performing a sequence of operations including groups of one or more individual operations having an associated status indication, a method is used for capturing an indication of system status. The method involves generating hierarchically ordered status indications reflecting the status of completion of sequentially performed groups of operations in which individual status indications are associated with corresponding groups of operations. The generated status indications are captured and retained following initiation of repetition of the groups of operations and are provided as identification of an attained operational status of the system for operation diagnosis (e.g., by display using LEDs).

20

005260" 5T269960